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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,683	09/15/2003	Melvin E. Wolfe JR.	28076/SV1094	9788

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EXAMINER
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PHAN, THIEM D

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/662,683

Applicant(s)

WOLFE ET AL.

Examiner

Tim Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 20-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/8/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicants' election with traverse of Group II (claims 11-19 filed in 4/04/05) is acknowledged. The traversal is on the grounds that the search or office action for Groups I and II claims, drawn to an article regarding a motor with a magnetic wire pole having a fuse and a method of making a motor, has no burden (Remarks, Page 7, lines 12-16). This is not found persuasive because the examiner has established a prima facie case having shown in the Office Action filed on 3/03/05, that the invention of Group I has a separate classification (class 310, subclass 68R) from the invention of Group II (class 29, subclass 596). Moreover, the inventions of Groups I and II each have a separate status in the art and clearly have a separate field of search which would be non-coextensive.

In accordance with MPEP § 803, the examiner has demonstrated that the inventions of Groups I and II are each independent or distinct as claimed (filed on 3/03/05)) and a serious burden would be placed on the examiner as discussed above.

With respect to the inventions of Groups I and II in the restriction requirement filed on 3/03/05, applicants assert that an appropriate explanation has not been applied. The examiner does not agree with this since it also indicates that winding the magnet wire on a bobbin for

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insertion to the stator or about a first lug. Therefore, MPEP 806.05(f) is still a valid reason for distinctness, for example the product of Group I does not require a step of winding the magnet wire about a first slug.

Accordingly, Claims 1-10 and 20-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Groups, there being no allowable generic or linking claim.

The Restriction filed on 3rd March 2005 is hereby **made Final**.

Applicants are required to cancel these nonelected claims (1-10 and 20-32) or take other appropriate action.

An Office Action on the merits of Claims 11-19 now follows.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 11-13 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sunaga et al (US 6,737,770 B2).

**As applied to claim 11**, Sunaga et al teach a process of making brushless motor, comprising:

- winding a first magnet wire of a coil (Fig. 1, 7) connecting to a first lug or terminal (Fig. 1, 48, col. 4, lines 57-59) in a winding board (Fig. 1, 40) and a first protrusion (Fig. 1, 5) in a stator (Fig. 1, 2), the winding board (Fig. 1, 40) being disposed on the stator (Fig. 1, 2) and including a switch (Fig. 1, 41) having at least an internal terminal, and a fuse (Fig. 7A, 60) having an input terminal and an exit terminal;
- laying the first magnet wire connection to an exit terminal and an input terminal on the fuse;
- terminating the first magnet wire connection at the switch; except for laying a magnetic wire shunt across the input terminal and the exit terminal on the fuse and severing that shunt.

It would have been a mere matter of design choice to have a magnet wire shunt across the input terminal and the exit terminal on the fuse and severing that shunt to make the fuse functionable, since it is known in the art that a circuit pattern (fig. 1 or 2, 31 & 32) is designed to connect the magnet wire of the coil to the terminals or lugs of the switch and the fuse and it appears that the invention would perform equally well or better with the circuit pattern (Fig. 4, 50) connection, instead of the exposed and floating magnet wire connectivity.

**As applied to claim 12**, Sunaga et al teach the connection or routing of the magnetic coil connectivity through the circuit pattern (Fig. 4, 50) on the printed wiring board, which is obvious to be more efficient than clipping an exposed wire for routing.

**As applied to claim 13**, Sunaga et al teach several switches (Fig. 1 & 6, 41) mounted on the printed wiring board (Fig. 1, 40) for changing directions of the drive current applied to the exciting coil (Fig. 1, 7, col. 4, lines 26-29).

I would be obvious to one of ordinary skill in the art at the time the invention was made to realize that a switch that changes current drive directions, even for single pole switch, must have internal and external terminals with blocks, which connect to the magnet coil.

**As applied to claim 16**, Sunaga et al teach the winding the first magnet wire of the coil (Fig. 1, left 7) about the first lug or terminal (Fig. 1, 41; col. 4, lines 57-59) in the winding board and the first protrusion or core (Fig. 1, left 5) in the stator (Fig. 1, 2) to form one of the two poles (Col. 3, lines 6-8).

**As applied to claim 17**, Sunaga et al teach the winding the second magnet wire of the coil (Fig. 1, right 7) about the second lug or terminal (Fig. 1, 41; col. 4, lines 57-59) in the winding board and the second protrusion or core (Fig. 1, right 5) in the stator (Fig. 1, 2) to form the other of the two poles (Col. 3, lines 6-8).

**As applied to claim 18**, Sunaga et al teach several switches (Fig. 1 & 6, 41) mounted on the printed wiring board (Fig. 1, 40) for changing directions of the drive current applied to the exciting coil (Fig. 1, 7, col. 4, lines 26-29).

I would be obvious to one of ordinary skill in the art at the time the invention was made to realize that a switch that changes current drive directions, even for single pole switch, must have internal and external terminals with blocks, which connect to the magnet coil.

6. Claims 14, 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sunaga et al in view of Lewchenko et al (US 6,058,595).

**As applied to claims 14, 15 and 19**, Sunaga et al teach a process of making brushless motor, including the electrical connection of the magnetic coil to the terminals (Col. 4, lines 57-59), which reads on applicants' claimed invention.

Lewchenko et al teach a method of manufacturing an armature with the hooks or tang terminals where the magnet wires are connected (Col. 1, lines 38-40), which is old art.

It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the two teachings by applying the terminal tangs, as taught by Lewchenko et al, as connecting point to the magnet wire of the coil and soldering or welding it in order to have good contact.

*Conclusion*


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 571-272-4568. The examiner can normally be reached on M - F, 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tim Phan  
Examiner  
Art Unit 3729



**A. DEXTER TUGBANG**  
**PRIMARY EXAMINER**

tp  
June 2, 2005